

**Claims**

1. A tuner comprising:
  - an RF (radio frequency) processing unit;
  - 5 an IF (intermediate frequency) demodulating unit for demodulating an intermediate frequency signal outputted from the RF processing unit; and
  - a trap filter disposed at a baseband signal line of the IF demodulating unit to eliminate noise of a baseband signal.
- 10 2. The tuner according to claim 1, wherein the trap filter eliminates a frequency signal of 4.85-5.25MHz.
- 15 3. The tuner according to claim 1, wherein the baseband signal is a baseband signal of US channel 6 in an NTSC broadcasting system.
- 20 4. The tuner according to claim 1, wherein the trap filter eliminates a frequency signal of a channel bandwidth in each broadcasting system.
- 25 5. The tuner according to claim 1, wherein the baseband signal line is a video baseband signal processing line.
- 30 6. The tuner according to claim 1, wherein the trap filter is disposed at an output port of the intermediate frequency demodulating unit or an output port of an SIF (sound intermediate frequency) trap filter.
- 35 7. A demodulating unit of a tuner, comprising:
  - a filter;
  - a sound signal processing line diverging from the filter to process a sound signal;
  - a video signal processing line diverging from the filter to process a video signal; and

a trap filter disposed at the video signal processing line to a beat component.

8. The demodulating unit according to claim 7,  
5 wherein the trap filter eliminates a FM radio signal.

9. The demodulating unit according to claim 7,  
wherein the trap filter eliminates a frequency signal of  
4.85-5.25MHz.  
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10. The demodulating unit according to claim 7,  
wherein the trap filter eliminates a frequency signal of an  
upper adjacent channel of a selected channel.

11. The demodulating unit according to claim 7,  
wherein the trap filter eliminates a frequency signal of a  
channel bandwidth in each broadcasting system.  
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12. The demodulating unit according to claim 7,  
wherein the video signal processing line includes a video  
detector, a sound IF trap filter, a video equalizer, and a  
video buffer amplifier.  
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13. The demodulating unit according to claim 7,  
wherein the sound processing line includes a sound detector  
and a sound signal passing filter.  
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14. The demodulating unit according to claim 7,  
wherein the trap filter is disposed at a video signal output  
port of an IF demodulating unit or an output port of an SIF  
trap filter.  
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15. A demodulating unit of a tuner, comprising:  
a sound signal processing line;  
a video signal processing line; and  
a trap filter disposed at the video signal process line  
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to eliminate a beat component generated due to a FM radio frequency.

5        16.    The demodulating unit according to claim 15,  
         wherein the FM radio frequency is in a range of 88.1-88.5MHz.

         17.    The demodulating unit according to claim 15,  
         wherein the trap filter eliminates a frequency signal of  
         4.85-5.25MHz.

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